Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

MTP 15HD RS Series • Setup Guide

This card provides quick start instructions for an experienced installer to set up and operate any of the MTP VGA video and RS-232 transmission systems.

Pre-installation — RS-232 Jumper

The receiver's RS-232 circuits are factory-set to be one-way, transmitter to receiver. If the system has only one **receiver**, jumper JMP 1 on the main board can be set for two-way communication as shown at right.

Unjumpered for One-way (Default)

JMP3
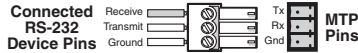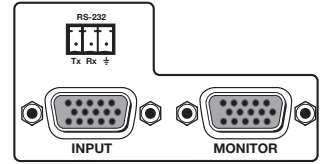JMP2
JMP1

Jumpered for Two-way
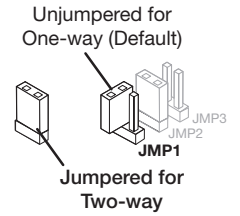
Installation

Step 1 — Mounting

Turn off or disconnect all equipment power sources and mount the MTP transmitter and up to eight receivers as required.
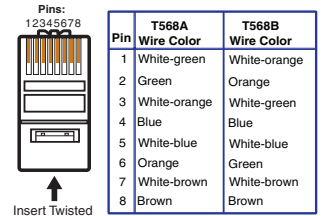
Step 2 — Transmitter Inputs

- Connect a computer (VGA) video source to the Input connector.
- Connect a VGA monitor to the Monitor connector.
- Plug an RS-232 device into the RS-232 port. Wire the connector as shown below.

Connected RS-232 Device Pins Receive / Transmit / Ground → Tx Rx Gnd **MTP Pins**

RS-232
Tx Rx ⏚

INPUT   MONITOR

Step 3 — TP Cables Between Units

- Terminate a TP cable as shown at right. Connect it between the transmitter's Output port and the receiver's Input port (both ends must match).

 > **NOTE:** If the unit is labeled "C7," only CAT 7 cable should be used.

- **For daisy-chaining,** connect up to eight TP cables between a receiver's Buffered Output port and a daisy-chained receiver's Input port.

Pins: 12345678

Pin	T568A Wire Color	T568B Wire Color
1	White-green	White-orange
2	Green	Orange
3	White-orange	White-green
4	Blue	Blue
5	White-blue	White-blue
6	Orange	Green
7	White-brown	White-brown
8	Brown	Brown

Insert Twisted Pair Wires

> **NOTE:** If you are using Enhanced Skew-Free™ A/V cable, use the TIA/EIA T568A standard only.

Step 4 — Receiver Outputs

- Connect a VGA monitor to the Output connector.
- Plug an RS-232 device into the RS-232 port. Wire the connector as shown in step 2, above.

RS-232
Tx Rx ⏚
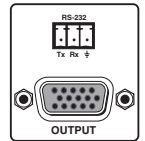
OUTPUT

Step 5 — Receiver DIP Switches

- **H Sync and V. Sync switches** — Set these switches up for positive sync or down for negative sync.
- **Composite Sync, (SOG), and Video switches** — Set these switches as shown in the following table to output the indicated format.

H SYNC + V SYNC + C SYNC SOG VIDEO END UNIT
ON
1 2 3 4 5 6

Output Format	C Sync	SOG	Video
RGBHV	▼	▼	▼
RGBS	▲	▼	▼
RGsB	▼	▲	▼
Component*	▼	▼	▲
S-Video*	▼	▼	▲
Composite*	▼	▼	▲

> **NOTE:** * Input video format must match.
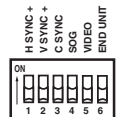
- **End Unit switch** — Set this switch up if either of the following is true:
  - The receiver being configured is the only receiver connected to the transmitter.
  - The receiver being configured is the last receiver in a daisy-chained system.

Step 6 — Power

Wire the 2-pole captive screw connectors for the included external 12 VDC power supplies (see image ①
on the right). Plug them into all units.

Grounding guidelines

Extron MTP 15HD RS products can be adversely affected by electrostatic discharge (ESD) if they are
not grounded correctly.

To prevent malfunctions or product damage, an experienced installer can correctly ground an
Extron MTP 15HD RS product in either of two ways:

- **Ground the power input port** — Insert one end of the grounding wire to the negative or ground
  pin on the power input connector (see image ① on the right). Tie the other end of the wire to an
  earth ground.

- **Ground the chassis** — Use a connector hex nut as shown in image ② on the right. Tie the other
  end of the wire to an earth ground.

If you have any questions about how to ground a product in a specific application, contact an Extron technical
support specialist.
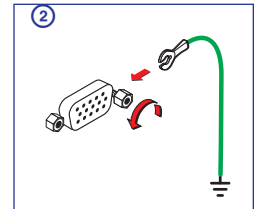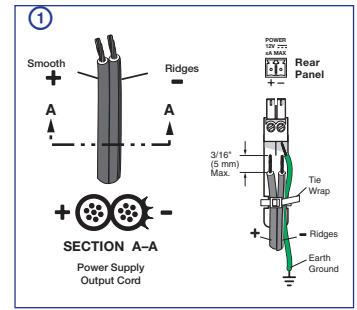
Step 7 — Pre-Peak, Peaking, and Level

- **Transmitter Pre-Peak switch** — View the image and set the Pre-Peaking switch for the best image
  quality to correct for long cable runs of the entire system (including all daisy-chained receivers).

- **Receiver Peaking control** — View the image and adjust the Peaking control for the best image. Minimum setting
  (full counterclockwise) is zero peaking.

- **Receiver Level control** — View the image and adjust the Level control for the best
  brightness level.
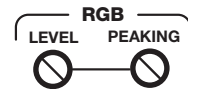
Step 8 — Skew Compensation (SEQ Receivers)

Pair skew can be measured with test equipment or by viewing a crosshatch test pattern. The SEQ receivers have built-in
skew compensation capabilities. Adjust the equalization as follows:

A. Zero the skew delay for red, green, and blue by using a small screwdriver to press and hold the Select button for
3 seconds. When the Red, Green, and Blue LEDs all go out, release the Select button.

B. Use UTP cable test equipment or examine the displayed image to determine which video signal (red, green or blue)
is shifted furthest to the right.

C. Select the furthest left video signal by using a small screwdriver to press and release the Select button until the LED
for the left-shifted color (Red, Green, or Blue) lights.

D. **Slowly** rotate the Adjust control clockwise until the selected color is properly converged.

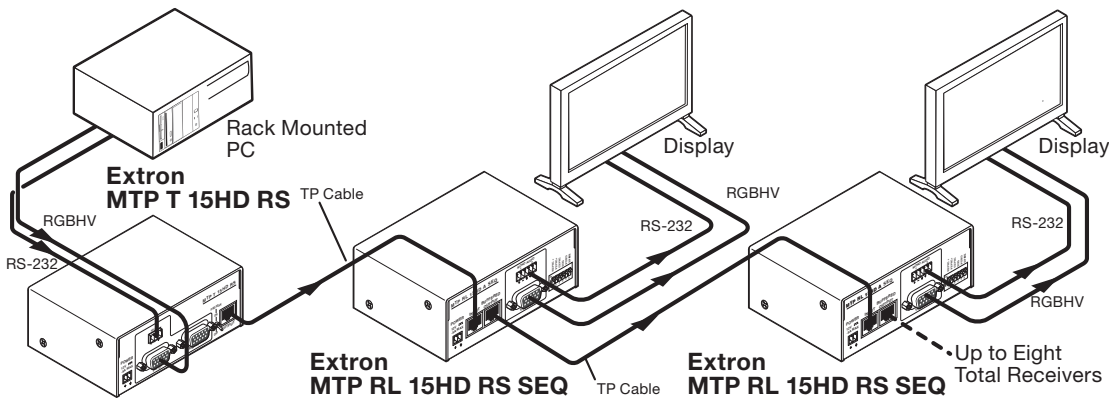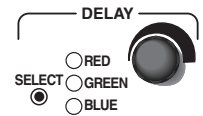**E.** If the remaining colors are left shifted, repeat steps C and D.

Figure 1. Example of a Typical MTP 15HD RS Application